Madroño, Vol. 47, No. 3, pp. 209–216, 2000

NOTEWORTHY COLLECTIONS

California

Arabis pinzliae Rollins (BRASSICACEAE).—Mono Co.: Inyo Nat. For., Sierra Nevada, ridge ca. 1 km ENE of Two Teats, 37°43′03″N, 119°05′35″W, elev. 3200–3280 m, krummholz woodland of *Pinus albicaulis* with *Lupinus lepidus* var. *lobbii, Leptodactylon pungens, Eriophyllum lanatum* var. *lanatum, Eriogonum ovalifolium* var. *nivale, Primula suffructescens,* etc., one colony in fine, gravelly, volcanic scree on SE-facing N slope just below ridgetop, 22 Aug. 1996, *H. Constantine-Shull 1158* (HSC). Verified by J. D. Morefield, Nevada Natural Heritage Program.

Previous knowledge. Known from 9 sites in Esmeralda Co., Nevada and 1 site in Mono Co., California at the north end of the White Mountains in granitic scree in steeply-sloped dry drainages on north to east aspects, elev. 3000–3350 m (J. D. Morefield and D. W. Taylor, Noteworthy Collections (California), Madroño 37:64–65, 1990; R. Rollins, in Hickman (ed.), The Jepson Manual, Higher Plants of California, 1993; J. D. Morefield, Status Report: Arabis pinzlae Rollins (1982, 1994), but not reported from the Sierra Nevada in these or any other available flora (e.g., A. Howald, Vegetation and Flora of Mammoth Mountain, Report for the Mammoth Mountain Ski Area, Mammoth Lakes, CA, 1983; M. Bagley, Sensitive Plant Survey for June Mountain and Rodeo Meadows, Report for the Mammoth/June Ski Resort, Inyo National Forest, Mono County, CA, 1988; N. F. Weeden, A Sierra Nevada Flora, 1996, etc.).

Significance. First record of the species from the Sierra Nevada. A range extension of ca. 78 km WSW from the Boundary Peak region in the White Mountains. This record may suggest a possibly very recent Sierran origin for this newly developed taxon (H. Constantine-Shull, Floristic Affinities of the San Joaquin Roadless Area, Inyo National Forest, Mono County, CA, 2000). Plants in the Sierran population fit *A. pinzliae* morphological characteristics; however, 2 out of the 15 plants measured had mature fruits 0.5 mm longer than expected for the taxon. Further analyses on this Sierran population may help to clarify the taxon's distinction from *A. platysperma* A. Gray var. *platysperma. Arabis pinzliae* should be sought at additional locations in the central-eastern Sierra, especially on adjacent ridges, and in the Glass Mountains ca. 38 km ENE of the Sierran population where there appears to be suitable habitat.

Artemisia michauxiana Besser (ASTERACEAE).—Mono Co., Sierra Nevada, streamside ca. 1.75 km E of Inyo Crater Lakes, 37°42′N 119°02′W, elev. 2500 m, *Abies magnifica* var. *magnifica* forest with *Pinus contorta* subsp. *murrayana* Critchfield, in gravelly pumice soil in a wet area along a stream with *Salix lemmonii, Carex nervina, Cicuta maculata* var. *angustifolia, Epilobium ciliatum* subsp. *ciliatum,* etc., 28 Jul. 1996, *H. Constantine-Shull 987* (HSC); Moist pumice soil beside Deadman Creek ca. 2.25 km E of Two Teats, 37°42′N 119°04′W, elev. 2680 m, open avalanche zone with *Artemisia tridentata* subsp. *vaseyana, Populus tremuloides, Salix lemmonii, Delphinium glaucum,* 1 Sept. 1996 *H. Constantine-Shull 1180* (HSC).

Previous knowledge. In subalpine to alpine scree, talus, and drainages in the White and Inyo Mountains and in the Marble Mountains of the Klamath Region, north to B.C., Montana, Colorado (L. Abrams and R.S. Ferris, Illustrated Flora of the Pacific States, WA, OR, and CA, Vol. IV, 1960; P.A. Munz, Supplement to A California Flora, 1968; L.M. Shultz in Hickman (ed.) The Jepson Manual, Higher Plants of California, 1993) but not reported from the Sierra Nevada in these floras or by any specimen recorded in the Cal Flora database, 1999. One undocumented sighting with no specimen was noted in Glacier Canyon in Yosemite (J. T. Howell, A list of the vascular plants of Tuolumne Meadows and vicinity, Sierra Club Nature Notes #13, 1944). This may be the reference to a Sierran range for this plant in A. Cronquist et al. Intermountain Flora Vol. 5—Asterales, 1994.

Significance. First documented report of the species from the Sierra Nevada. A range extension of ca. 75 km from the Montgomery Peak region of the White Mountains. These eastern Sierran populations occur at lower elevations (2500–2680 m) than the 3000 m minimum elevation recorded by the Jepson Manual and specimens cited in the Cal Flora database.

Artemisia ludoviciana Nutt subsp. *candicans* (Rydb.) Keck (ASTERACEAE).—Mono Co., Sierra Nevada, Minaret Meadow ca. 1 km E of Minaret Summit, 37°39′27″N, 119°02′52″W, elev. 2690 m, in gravelly pumice soil along streamside in and below the meadow with *Pinus contorta* ssp. *murrayana, Salix lemmonii, Lonicera involucrata* var. *involucrata, Arabis holboellii* var. *pinetorum,* 20 Aug. 1996 *H. Constantine-Shull 1224* (HSC).

Previous knowledge. In dry woodland, shrubland from the northern Sierra Nevada and Modoc Plateau to Washington, Montana, and Utah (L. Abrams and R. S. Ferris, Illustrated Flora of the Pacific States, WA, OR, and CA, Vol. IV, 1960; L. M. Shultz in Hickman (ed.) The Jepson Manual, Higher Plants of California, 1993; A. Cronquist et al. Intermountain Flora Vol. 5—Asterales, 1994; Cal Flora database, 1999).

Significance. First report of the subspecies for Mono County. A range extension of ca. 222.6 km SSE from Donner Pass Ridge, Nevada Co., CA (Cal Flora database).

—Helen Constantine-Shull, 825 Union Street, Arcata, CA 95521 and John O. Sawyer, Jr., Dept. of Biology, Humboldt State University, Arcata, CA 95521.

These findings are presented in Constantine-Shull, H. 2000. Floristic Affinities of the San Joaquin Roadless Area, Inyo National Forest, Mono County, California. M.A. thesis. Humboldt State University, Arcata, CA.

The thesis is also published with University Microfilms, Incorporated.

A California Native Species Field Survey Form for *Arabis pinzliae* has been submitted to the Natural Diversity Data Base, California Department of Fish and Game.

California

Liquidambar styraciflua L. (HAMAMELIDACEAE)—Sacramento County, on the north bank of the American River in the American River Parkway, a few hundred meters downriver of the Estates Drive entrance,

N38°33′, W121°22′, 16 June 1998, *J. M. Randall s.n.* (DAV). A fruiting tree was found growing along the river in this semi-wild preserve bordered by residential areas. The tree appears to be a naturalized specimen, but it is possible that it was planted and then neglected. The narrow strip of forested land along the river where the tree occurs is dominated by *Quercus lobata, Populus fremontii, Fraxinus latifolia,* and *Acer negundo* var. *californicum* and the exotic *Sapium sebiferum.* Prominent understory plants include *Toxicodendron diversilobum* and numerous exotics including *Arundo donax, Conium maculatum, Raphanus raphanistrum, Rubus discolor, Saponaria officinalis,* and *Vinca major.*

Previous knowledge. Native to the eastern North America, from Connecticut to southern Illinois and south to Florida, west to Oklahoma and south again to eastern Mexico and Guatemala (H.A. Gleason and A. Cronquist 1991, Manual of Vascular Plants of Northeastern United States and Adjacent Canada. New York Botanical Garden, NY). This species, commonly called sweet gum, is commonly cultivated as an ornamental tree, and widely recognized for its unusual spiky-spherical fruits, beautiful 3 to 7-pointed leaves, and fall color. Many cultivars and hybrids have been developed with the other two species of *Liquidambar* that are native to Asia (A. L. Jacobson 1996. North American Landscape Trees. 10 Speed Press, Berkeley, CA). Its wood is valued for furniture, flooring and veneer. Reported as growing wild outside of its original range in a large population at one site in northeastern Illinois (F. Swink and G. Wilhelm. 1994. Plants of the Chicago Region. 4th edition. Indiana Academy of Science, Indianapolis).

Significance. First record in California. We know of no other reports of establishment of *L. styraciflua* west of its native range despite widespread cultivation of the species in low elevation areas of the western U.S. We have also been unable to find reports of *L. styraciflua* escaping cultivation on other continents.

Sapium sebiferum (L.) Roxb. (EUPHORBIACEAE).—Sacramento County, on the north bank of the American River in the American River Parkway, a few hundred meters downriver of the Estates Drive entrance, N38°33′, W121°22′, 28 June 1998, *B. A. Meyers-Rice #MR980603* (DAV). Approximately two dozen semi-mature trees were found growing along the river in a wildland preserve bordered by residential areas. Numerous seedlings have also been found on sandbars along the river. The narrow strip of forested land along the river is dominated by *Quercus lobata, Populus fremontii, Fraxinus latifolia,* and *Acer negundo* var. *californicum.* Prominent understory plants include *Toxicodendron diversilobum* and numerous exotics such as *Arundo donax, Conium maculatum, Raphanus raphanistrum, Rubus discolor, Saponaria officinalis,* and *Vinca major.*

Previous knowledge. Native to China. *Sapium sebiferum* (Chinese Tallow Tree) was introduced to the east coast of the USA in the late 1700s. It now occurs in every coastal state from North Carolina to south Texas, inland to Arkansas, and in Florida as far south as Tampa; overseas it has escaped cultivation in Japan, Formosa, India, Pakistan, central and southern Europe, Martinique, and the Sudan (K. A. Bruce, et al. Natural Areas Journal, 17:255–260, 1997). *Sapium sebiferum* is used in China as a source of soap and other products, and was introduced to the USA as a potential oilseed crop. In California it is used as a landscape tree and is valued for its attractive habit, glossy green foliage that turns red in the fall, and showy white seeds.

Significance. First record in a California wildland. The parent stock for these plants may be landscape trees from the surrounding suburbs. *Sapium sebiferum* has been seen in two other wildland locations in Placer County, at Antelope Creek and at Strap Ravine (D. Bishop, pers. comm.). The closest documented occurrence of *Sapium sebiferum* outside of cultivation is in coastal Texas, approximately 2600 km distant. This species has great potential to become a serious weed in riparian forests of California's Central Valley. Birds, especially finches and warblers, feed upon the seed and may help to spread the fruit (personal observation). Seed can also be transported by water.

Sesbania punicea (Cav.) Benth. (FABACEAE).—Sacramento County, on the margins of William B. Ponds wetland in the American River Parkway on the north side of the River at the Arden Way entrance, N38°33′, W121°22′, 28 June 1998, *B. A. Meyers-Rice #MR980604* (DAV). Large numbers of plants, ranging in age from seedlings to mature, fruiting specimens, were found growing on the margins of the pond. This pond is a heavily developed fishing pond within the American River Parkway's wildland area. Various sized specimens were also established at the low flow edges of the American River, especially on islands in the middle of the river. Total distribution in the parkway is from Ancil Hoffman Park downstream to the California Exposition floodplain.

Previous knowledge. Native to South America (Argentina, Brazil, Paraguay, and Uruguay). As an exotic species in the USA, it occurs from northern Florida and southern Georgia to eastern Texas. Previously known in California at only a few sites in Butte County (V. Oswald and L. Ahart, 1994. Manual of the Vascular Plants of Butte County, California. California Native Plant Society. Sacramento). It has been seen the area of Suisun Marsh in the California Delta, but has apparently been eradicated from this location (A. Shapiro, pers. comm.). Another location in northern Sacramento County is along Dry Creek within the Cherry Island Golf Course (R. Robison, personal communication). In southern Africa it is a serious weed in South Africa (Natal, Transvaal, and Cape Provinces), Lesotho, and Zimbabwe. *Sesbania punicea* is widely used as an ornamental plant because of its attractive compound leaves, bright sprays of red flowers and persistent winged fruit. The species *Sesbania tripetii* is closely related, and indeed may also be a synonymous name. The name "*Daubentonia punicea*" is also a synonym.

Significance. The first collection for Sacramento county. Other than the Butte County locations, the closest reported occurrence of *Sesbania punicea* is in far-eastern Texas. It is unclear how this plant was transported to California. It is likely to become a serious weed in the riparian areas of California's Central Valley. It forms dense thickets, especially in moist areas, in the southeastern USA and southern Africa. Its seeds are effectively transported by water.

—Barry A. Meyers-Rice, Ramona Robison, John M. Randall, The Nature Conservancy, Wildland Invasive Species Program, Department of Vegetable Crops and Weed Sciences, University of California, Davis, CA 95616.

Sonora, Mexico

Salvia similis Brandegee (LAMIACEAE).—Municipio de Guaymas, peninsula at S side of Algodones Bay, 2 km W of Cerro Tetas de Cabra summit, 27.9°N, 111.0°′W, north-facing granite slope, elev. 5–20 m, desertscrub with *Stenocereus thurberi, Jatropha cuneata, Bursera microphylla, Fouquieria diguetii*; uncommon shrubs, about 1 m tall, 17 March 1983, *Burgess 6361 et al.* (ARIZ).

Significance. First record for mainland Mexico.

Previous knowledge. Otherwise known from Baja California Sur (I. L. Wiggins, *In*, F. Shreve & I. L. Wiggins, part 2, 1964 Stanford Univ. Press) where it is rather widespread and Isla San Pedro Nolasco (R. S. Felger and C. H. Lowe, Natural History Museum of Los Angeles County, Contributions in Science 285, 1976).

Notes. Apparently rare on the mainland although common on Isla San Pedro Nolasco on east-facing slopes near the summit. Both of these populations are on north- and east-facing granite slopes above the sea; there are very few mainland habitats where these conditions are duplicated.

Eragrostis spicata Vasey *(POACEAE).*—Municipio de Guaymas: Bahía San Carlos, Crestón area, ca. 3 m elev., disturbed habitat, 8–10 m N of highway, among *Prosopis glandulosa*, perennial, forming dense clumps ca. 1–1.5 m tall, colony of dozen or so plants, 18 November 1984, *Felger 84–544 & Valdez Zamudio* (ARIZ, MEXU, TEX); 20 March 1986, *Felger 86–67 & Sanders* (ARIZ). Mex Hwy 15, 1.7 mile SE of Pitahaya (Belem, Río Yaqui) junction, elev. 10 m, 27°45′N, 110°24′W, coastal thornscrub, pond near roadside, densely shaded by *Prosopis glandulosa;* robust grass to 1.8 m tall, 11 October 1985, *Felger 85–1248 & Reichenbacher* (ARIZ, MEXU). Mex Hwy 15, 3.6 mile S of Pitahaya (Belem, Río Yaqui) junction, ca. 10 m, 27°42½′N, 110°22′W, in shade of mesquites; common robust perennial to 1 m tall, 11 October 1985, *Felger 85–1248 & Reichenbacher* (ARIZ, MEXU). Municipio de Hermosillo: Hwy 24, 5.0 mile N of Sahuaral (4.7 mile N of Bahía San Agustín Rd junction), elev. 5 m, 28°23′N, 111°21′W; low lying, temporarily swampy area; fine-textured silty-muddy soil; shallow standing water in lowest areas; shade of mesquite; common, 12 October 1985, *Felger 85–1586 & Reichenbacher* (ARIZ, MEXU).

Significance. First record for Sonora.

Previous knowledge. Texas, northeastern Mexico, Baja California Sur, and Argentina and Paraguay (F. W. Gould and R. Moran, San Diego Society of Natural History Memoir 12, 1981; F. O. Zuloaga, et al. Monographs in Systematic Botany from Missouri Botanical Garden 47, 1994).

Notes. This large, perennial grass is a common and consistent element in the grassy, savanna-like swampy habitats of coastal west-central Sonora between the Río Yaqui and Empalme (southeast of Guaymas), with outlier populations at San Carlos north of Guaymas and near Sahuaral (east of Tastiota). The plants are reproductive at least in March and November. In west-central Sonora it often grows beneath mesquite (*Prosopis glandulosa* var. *torreyana*) with *Kosteletzkya hispidula, Luffa operculata* var. *intermedia, Phyllanthus evanescens, Sesbania herbacea,* and grasses including *Echinochloa crusgalli, Leptochloa fusca* ssp. *uninervia, L. panicea* ssp. *brachiata, L. viscida, Panicum hirticaule* and *Sporobolus airoides.*

Portulaca johnstonii J. Henrickson *(PORTULACACEAE).*—Municipio de Guaymas, 0.5 km W of Estero Soldado at ca. 1 km inland from shore (ca. 6 km E of Bahía San Carlos), ca. 2 m elev., coastal desertscrub, sandy soil, locally common, 18 November 1984, *Felger 84–421 & Valdez Zamudio* (ARIZ, MEXU, TEX).

Significance. New record for Sonora and the Sonoran Desert.

Previous knowledge. Known only from the type collection in Coahuila in the Chihuahuan Desert (J. Henrickson, Madroño 28:78–79, 1981).

Notes. No differences were noted between the Sonoran and Chihuahuan plants. The Sonora collection was made in an area of natural vegetation but near disturbed habitats in an area rapidly being urbanized. Immature seeds are reddish (rust-colored) throughout, the body becomes iridescent blackish with maturity. Due to the radiating fimbriae on the seeds, unique in the genus, this plant is hereby given the common name 'Punk Portulaca' (Fig. 1). It would be interesting to study the origin and development of these fimbriae; the plants are otherwise similar to *P. oleracea.*

Ximenia parviflora Benth. var. *glauca* DeFilipps *(OLACACEAE).*—Municipio de Guaymas: Cañón La Pintada, large riparian canyon ca. 4 mile E of La Pintada (ca. 33 mile S of Hermosillo on Mex Hwy 15), riparian desertscrub, on slopes of canyon side, not common, flowers dull yellow, *Felger 3267* (ARIZ). Broad spiny shrubs ca. 1.5 m tall, apparently evergreen, herbage with a reddish cast; flowers dull yellow, the calyx red, the petals densely pubescent inside with many whitish and flattened hairs; flowering late May.

Significance. First record for this genus in Sonora.

Previous knowledge. Known only from Baja California Sur.

Notes. A unique feature of this genus is the corolla, comprised of 4 or 5 free petals densely covered inside with hairs. These hairs are said to be brownish and barbed; in the Sonoran specimen the hairs are whitish when fresh but become brownish with age, and I do not find barbed hairs on these specimens, or those from Baja California Sur, or the half dozen specimens of *X. americana* at ARIZ.

A previous collection from Baja California Sur (*Johnston 3718*; I. M. Johnston, Proceedings, California Academy of Sciences (4) 12:951–1218, 1924), misidentified as *X. pubescens* seems to be the source of the erroneous reference to *X. pubescens* in Baja California (I. L. Wiggins, Flora of the Sonoran Desert, *loc. cit.*; I. L. Wiggins, Flora of Baja California, 1980 Stanford Univ Press).

—Richard Stephen Felger, Drylands Institute, PMB 405, 2509 North Campbell Avenue, Tucson, AZ 85719.

Arizona and Sonora

Vauquelinia californica subsp. *sonorensis* Hess & Henrickson (Rosaceae).—SONORA: Municipio de Gen. Plutarco Elías, Sierra Cubabi, middle-elevation on north-facing drainage; on granite with *Dodonaea viscosa, Eriogonum* sp., *Galium stellatum, Solanum hindsianum,* vicinity 31°43′25″N, 112°50′50″W, elev. ca. 750 m, shrub ca. 8 ft tall, 11 November 1998, *Pate s.n.* (ARIZ). [Sierra Cubabi] N 35 11 000 E, 3 27 500, ca. 700 m SE of highest point in area, 1130 m elev., granite with *Stenocereus thurberi, Justicia californica, Ferocactus covillei, Eriogonum wrightii, Encelia farinosa,* scattered locally in protected areas, 19 March 1991, *Baker 8130 & Johnson* (ASU).—ARIZONA: Maricopa County, Barry M. Goldwater Airforce Range, Sand Tank Mountains, 32°39′43.3″N,

112°19′51.2″W, 2800 ft, NE-facing steep rhyolite slope; uppermost elevational limit of Sonoran Desert including *Acacia greggii, Anisacanthus thurberi, Calliandra eriophylla, Carnegiea gigantea, Cercidium microphyllum, Coursetia glandulosa, Encelia farinosa, Ephedra aspera, Eriogonum fasciculatum, Fouquieria splendens, Lycium parishii, Olneya tesota, Opuntia chlorotica, Prosopis velutina, Viguiera parishii, Yucca arizonica,* 10 October 1995, *Felger 95–337, Wilson, Smith, & Speich* (ARIZ). Sand Tank Mountains, 2 mile SW of Squaw Tit Peak, along rocky drainage with *Juniperus,* 3200 ft, 1 January 1995, *Malusa s.n.* (ARIZ).

Previous knowledge. Documented only from the Ajo Mountains in Organ Pipe Cactus National Monument, Pima County, Arizona, and disjunct in local areas on the eastern slopes of the Sierra Juarez in northern Baja California (W. J. Hess and J. Henrickson, Sida 12:101-163, 1987).

Significance and natural history notes on the species in Sonora. First record for this distinctive subspecies from mainland México and the second documentation of an Arizona population. Sierra Cubabi in Sonora is the nearest range to the Ajo Mountains, and ca. 30 km directly south-southwest from it. The Sand Tank Mountains in Arizona are ca. 54 km northeast of the Ajo Mountains. The Sonora and Ajo Mountain populations are within the Sonoran Desert, the Sand Tank Mountain population is mostly at the upper elevational limit of the desert. All three mountains support Sonoran Desert species to their summits.

A locality mapped by Turner, et al. (Sonoran Desert Plants: an ecological atlas, 1995, Univ. of Arizona Press) as a "sighting" west of the Ajo Mountains, in Yuma County, is presumed to be erroneous.

Of the four subspecies of *V. californica,* only subsp. *pauciflora* was known for certain from Sonora (Hess and Henrickson, 1987). In Sonora it is documented from canyons and slopes at the north end of the Sierra el Tigre, at 1140 m, where it is apparently quite rare. The several collections at ARIZ are probably taken from the same one or two shrubs. The substrate is rhyolite although limestone intrusions occur nearby. Here *Vauquelinia* occurs at the upper margin of Sonoran desertscrub merging to thornscrub and just below the oak zone (*Quercus oblongifolia*). Associated plants include *Coursetia glandulosa, Dodonaea viscosa, Fouquieria splendens, Fraxinus gooddingii, Hechtia montana, Juglans major, Prosopis velutina, Rhus microphyllum,* and *Yucca arizonica.* Elsewhere this subspecies is known from limestone substrate in ecotone of Chihuahuan desertscrub and oak woodland, and lower elevations in oak woodland.

Subspecies *californica* occurs in both states of Baja California and southern Arizona including the Baboquivari Mountains near the Sonora border. It should be sought in nearby north-central Sonora. An observation of rosewood in the Sierra del Viejo near Caborca (Turner et al. 1995, *loc. cit.*) may be this subspecies or subsp. *sonorensis.*

While admiring *V. californica* subsp. *sonorensis* on a field trip of the Arizona Native Plant Society to Alamo Canyon in the Ajo Mountains, Felger suggested that it should be sought in mountains in northwestern Sonora east of Sonoyta such as the Sierra Cubabi, mountains that have scarcely been botanically explored. Pate replied that she had indeed seen it there, and soon thereafter verified it with the record cited here. Subsequently Felger located the Baker specimen at ASU.

The paucity of records for *V. californica* in northern Sonora seems unusual given its widespread occurrence and diversity (three subspecies) in adjacent southern Arizona. In view of the discovery of the Sierra Cubabi population, it seems that absence of records in much of northern Sonora for many other species likewise may be due to a lack of botanical exploration in remote and now often dangerous borderland territory. Distant areas are often far better known (e.g., Martin, Yetman, Fishbein, Jenkins, Van Devender, and Wilson, 1998, Gentry's Río Mayo Plants, University of Arizona Press).

Hess and Henrickson (1987) give a maximum size of 10 m for any *Vauquelinia,* 8 m for any of the four subspecies of *V. californica,* and 7 m for subsp. *sonorensis.* A tree in Alamo canyon, in the Ajo Mountains, carefully measured by Robert Zahner and associates (National Register of Big Trees, 1996, American Forests, Washington, D.C.) was 14.3 m (47 ft) in height with an average crown spread of 12.2 m (40 ft), and 2.0 m (78 inch) in girth at 1.4 m (4.5 ft) above ground level (original measurements in English units). Thus the most xeromorphic taxon (Hess and Henrickson 1987) in the genus contains the largest-sized individual.

—Richard Felger, Drylands Institute, PMB 405, 2509 North Campbell Avenue, Tucson, AZ 85719, and Ami Pate, Organ Pipe Cactus National Monument, Rt 1 Box 100, Ajo, AZ 85321.

Oregon

Myriophyllum ussuriense (Regel) Maxim. (HALORAGACEAE).—Clatsop Co.: Columbia River, Cathlamet Bay, Lewis and Clark National Wildlife Refuge, Russian Island, 4 miles WNW of Knappa, T8N, R8W, Sec. 11. On mud along tidal channels, subject to daily freshwater tidal inundation. 14 August 1992. *J.A. Christy 8205* (MO, NY, OSC, V).

Previous knowledge. Taiwan, China, Japan, Russian Far East, British Columbia. First reported from North America by Ceska et al. (Brittonia 38:73–81, 1986), it is known from over a dozen sites in southern British Columbia, including Vancouver Island, with the earliest collection dating from 1916. This is one of two collections from the estuary of the Columbia River of Oregon and Washington. Both sexes of *M. ussuriense* are present in British Columbia, but no flowers were found in either of the U.S. populations. We consider it to be a rare native species with an amphi-Beringian distribution.

Significance. New to the United States; new to Oregon.

—John A. Christy, Oregon Natural Heritage Program, 821 SE 14th Ave., Portland, OR 97214; Oldriska Ceska and Adolf Ceska, P.O. Box 8546, Victoria, B.C. V8W 3S2, Canada.

Washington

Myriophyllum ussuriense (Regel) Maxim. (HALORAGACEAE).—Wahkiakum Co.: Columbia River, Julia Butler Hansen National Wildlife Refuge, small wetland across Steamboat Slough from Price Island, T9N, R6W, Sec. 16. On mud along Steamboat Slough, subject to daily freshwater tidal inundation. 29 July 1992. *J. A. Christy 8164* (WSU).

Previous knowledge. See report above for Oregon.

Significance. New to the United States; new to Washington.

—John A. Christy, Oregon Natural Heritage Program, 821 SE 14th Ave., Portland, OR 97214; Oldriska Ceska and Adolf Ceska, P.O. Box 8546, Victoria, B.C. V8W 3S2, Canada.

Oregon

Carex longii Mack. (Cyperaceae).—Clatsop Co., wet, peaty cranberry field, 1.6 air km SSW of Cullaby Lake, Delmoor Loop Rd., elev. 4 m, T7N R10W S27, 2 Oct. 1999, *Zika 14470* (MICH, OSC, WTU).

Previous knowledge. Native to eastern North America, west to Texas. A member of the *Carex straminea* complex in *C.* section *Ovales.* For an identification key to the species, see Rothrock *et al.* (Canadian Journal of Botany 75: 2177–2195, 1997). Long's sedge is a common adventive in cultivated cranberries in New England. The seeds of this and other cranberry weeds were apparently introduced on the Pacific coast by the transport of *Vaccinium macrocarpon* vines between agricultural areas.

Significance. First report for Oregon.

Chaenomeles speciosa (Sweet) Nakai (ROSACEAE).—Jackson Co., spreading from cultivation to roadside ditches, ca. 25 seen, Applegate River valley ca. 12 air km NNE of dam at Applegate Reservoir, elev. 546 m, T39S R3W S28, 23 May 1991, *Zika 11122* (OSC).

Previous knowledge. Native to eastern Asia, and an occasional weed in eastern North America, W to Wisconsin. Flowering quince is a common ornamental in western OR.

Significance. First record as an escape from cultivation in Oregon.

Cotoneaster horizontalis Decne. (Rosaceae).—Lane Co., naturalized in Willow Creek Natural Area, with *Fraxinus, Populus, Crataegus,* West Eugene, elev. 122 m, T18S R4W S3, 9 July 1998, *Voss 1936* (OSC); Tillamook Co., bird-sown weed in grassland, S aspect, Cascade Head, elev. 275 m, T6S R11W S14, 14 Aug. 1986, *Zika 9989* (WTU).

Previous knowledge. Native to China and planted for ornament W of the Cascades. Rock cotoneaster fruits heavily in autumn, and birds such as American robins (*Turdus migratorius*) are commonly observed eating the colorful fruit and dispersing the seed of this and other *Cotoneaster* species.

Significance. First report as a wild plant in Oregon.

Cotoneaster lacteus W. W. Sm. (ROSACEAE).—Curry Co., bird-sown weed in roadside thickets, Route 101, Winchuck, T41S R13W S23, 24 Oct. 1990, *Zika 11024* OSC; roadside thickets, Route 101, Brookings, T41S R13W S5, 24 Oct. 1990, *Zika 11033* (OSC); Lane Co., weed in *Quercus garryana* woods, Morse Ranch, Eugene, elev. 120 m, 3 Dec. 1999, *R. Love 9962* (WTU).

Previous knowledge. Late cotoneaster is native to China, commonly planted W of the Cascades, and known to be invasive.

Significance. First report as a garden escape for Oregon.

Cotoneaster simonsii Baker (Rosaceae).—Coos Co., edge of coniferous woods, Route 101 near Saunders Lake, elev. 24 m, T23S R13W S35, 8 Sept. 1999, *Zika 14322* (WTU); Curry Co., roadside thicket, Route 101, Winchuck, T41S R13W S23, 24 Oct. 1990, *Zika 11025* OSC; Tillamook Co., steep bank, Route 101, Nehalem, elev. 15 m, T3N R10W S27, 17 Sept. 1999, *Zika 14365* (WTU).

Previous knowledge. Native to the Himalayas, Himalayan cotoneaster is commonly planted as an ornamental in western Oregon, Washington, and British Columbia.

Significance. First report for Oregon as a garden escape.

Eleocharis quadrangulata (Michx.) Roem. & Schult. (CYPERACEAE).—Lane Co., large clone, long-established but local weed, wetland clay soil, full sun, with *Ludwigia palustris, Eleocharis palustris, Juncus marginatus, Ventenata dubia,* degraded wet prairie by abandoned airport runway and old race track, West Eugene, elev. 117 m, T17S R4W S33, 8 July 1997, *Alverson & Zika 13225* (OSC).

Previous knowledge. Native to eastern North America, west to Texas. Square-stemmed spike-rush is considered native in California.

Significance. First report for Oregon, but surely adventive, not native, on this site with a history of decades of disturbance in the industrial zone of Eugene.

Hypericum majus (A. Gray) Britton (CLUSIACEAE).—Clatsop Co., cranberry field, with *Juncus canadensis,* Delmar Loop Rd., elev. 4 m, T7N R10W S22, 2 Oct. 1999, *Zika 14450* (OSC, WTU); Coos Co., cranberry field, with *Juncus pelocarpus,* Randolph Rd., 6 km N of Bandon, elev. 52 m, T28S R14W S4, 7 Sept. 1999, *Zika 14249* (WTU).

Previous knowledge. Greater Canadian St. Johnswort is native to wetlands across northern North America, including British Columbia & Washington. However, a number of Pacific coast populations are adventive, in gravel pits, railroad yards, and cranberry farms, where they were undoubtedly introduced from eastern cranberry states, along with *Hypericum boreale, H. canadense, H. ellipticum,* and *Triadenum fraseri.*

Significance. First report for Oregon. All known populations are weeds in agricultural settings, and are adventive, not native.

Luzula arcuata (Wahlenb.) Swallen subsp. *unalaschcensis* (Buchenau) Hultén (Juncaceae).—Hood River Co., wet sunny mossy banks of Lost Lake, elev. ca. 1000 m, 29 June 1924, *Henderson 778* (ORE).

Previous knowledge. Circumboreal and native, curved woodrush is known from collections in Washington on Mt. Rainier and Mt. Adams, 85 km N.

Significance. First report for Oregon.

Luzula forsteri (Sm.) DC. (JUNCACEAE).—Marion Co., lawn, Salem, Apr. 1910, *Peck 5135* (WILLU).

Previous knowledge. Southern woodrush is native to Europe.

Significance. First report for Oregon. Perhaps only a waif, but should be sought in the Salem area again.

Polygonum sagittatum L. (POLYGONACEAE).—Clatsop Co., common, ditches and marshy borders of cultivated cranberry field, with *Carex chordorrhiza, Juncus brevicaudatus,* Delmar Loop Rd., elev. 4 m, T7N R10W S22, 2 Oct. 1999, *Zika 14459* (OSC, WTU).

Previous knowledge. Native to eastern North America, west to Colorado. Arrow-leaf tearthumb is weedy in cultivated cranberry fields in Massachusetts (Sears et al. An Illustrated Guide to the Weeds of Cranberry Bogs in Southeastern New England, 1996).

Significance. First report for Oregon.

Zantedeschia aethiopica (L.) Spreng. (ARACEAE).—Curry Co., steep W aspect, base of eroding sea bluffs,

with *Holcus lanatus, Equisetum telmateia,* Nesika Beach, elev. 5–30 m, T35S R15W S36, 20 May 1997, *Zika 13085* (OSC).

Previous knowledge. Native to Natal, and a weed in California. Altar lily was originally planted on a blufftop as an ornamental, and subsequently dropped downslope as erosion undermined garden areas. Persisting for many years and spreading across a sandy precipice, despite control efforts.

Significance. First report as an escape from cultivation in Oregon.

WASHINGTON

Berberis darwinii Hook. (BERBERIDACEAE).—Grays Harbor Co., steep shrubby slope, with dense *Rubus armeniacus, Lonicera involucrata, Rubus spectabilis*, N aspect, above Route 105 near Bigelow Rd., S of Aberdeen city limits, elev. 15 m, T17N R9W S20, 25 April 1998; *Zika 13422* (WTU).

Previous knowledge. Native to Chile and commonly cultivated at low elevations in western Oregon and Washington. Darwin's barberry is naturalized on the coast of Coos Co., Oregon, 400 km to the south.

Significance. First record as a wild plant in Washington.

Calluna vulgaris (L.) Hull (ERICACEAE).—Pacific Co., sandy cranberry field, with *Lythrum portula, Bidens tripartita,* Pioneer Rd., 2.5 km NE of Long Beach, elev. 5 m, T10N R11W S10, 31 Aug. 1999, *Zika 14200* (WTU).

Previous knowledge. A common ornamental west of the Cascades in the Pacific Northwest. Heather is a weed on peaty soils and in cranberry farms in S British Columbia, 300 km N.

Significance. First report as an escape from cultivation in Washington.

Carex longii Mack. (CYPERACEAE).—Grays Harbor Co., cranberry fields and drainage ditches, with *Juncus effusus,* 1 km N of County Line Rd., elev. 5 m, T15N R11W S7, 29 Sept. 1998, *Zika 13641* (WTU); Pacific Co., ditch in cranberry field, with *Lysimachia terrestris,* Pioneer Rd. 7 km N of Ilwaco, elev. 5 m, T10N R11W S10, 12 Sept. 1998, *Zika 13592* (WTU); peaty disturbed ground, with *Ledum groenlandicum,* near Jim Street, 2 km NE of Seaview, elev. 5 m, T10N R11W S22, 31 Aug. 1999, *Zika 14193* (WS).

Significance. First report for Washington.

Cotoneaster dielsianus E. Pritz. ex Diels (ROSACEAE).—King Co., *Thuja* hedge, campus of Univ. of Washington, Seattle, elev. 25 m, T25N R4E S16, 6 Nov. 1999, *Zika 14707* (WTU); Kitsap Co., woods near New Brooklyn Rd., Bainbridge Is., Puget Sound, elev. <100 m, T25N R2E S21, 28 Sept. 1999, *Zika 14426* (US, WTU); Pacific Co., sandy edge of coniferous woods, NE of Black Lake, elev. 5 m, T10N R11W S28, 30 Sept. 1999, *Zika 14436* (WTU).

Previous knowledge. Diels' cotoneaster is native to China, and planted for its ornamental fruit west of the Cascades.

Significance. First report as a naturalized plant in Washington.

Cotoneaster franchetii BOIS (ROSACEAE).—Grays Harbor Co., thickets, with *Picea sitchensis, Rubus armeniacus,* Route 105, E of Ocosta, elev. 10 m, T16N R11W S22, 19 Oct. 1998, *Zika 13650* (WTU); King Co., thickets, Burbank Park, Mercer Is., Lake Washington, elev. 6 m, T24N R5E S6, 6 Oct. 1999, *Zika 14537* (WTU); San Juan Co., edge of forest, near pond on Turn Point, with *Symphoricarpos,* San Juan Is., Puget Sound, elev. 8 m; T35N R2W S18, 24 Oct. 1999, *Zika 14643* (WTU).

Previous knowledge. Native to China, commonly cultivated west of the Cascade Mtns. in the Pacific States. Franchet's cotoneaster is naturalized in western Oregon and coastal California.

Significance. First record as a garden escape in Washington.

Cotoneaster lacteus W. W. Sm. (ROSACEAE).—Grays Harbor Co., gravel roadbank, Route 109, NW of Chenois Cr., elev. 20 m, T18N R11W S15, 4 Oct. 1999, *Zika 14517* (WTU); King Co., cracks in asphalt parking lot, Mercer Middle School, S Oregon St., Seattle, elev. 30 m, T24N R4E S16, 25 Sept. 1999, *Zika 14413* (WTU).

Significance. First report as a garden escape for Washington.

Cotoneaster rehderi Pojark. (ROSACEAE).—King Co., shade of *Pseudotsuga,* Alder Crest School, 195th St NE, elev. < 50 m, T26N R4E S4, 25 Sept 1999, *Zika 14414* (WTU); Kitsap Co., woods near Gazzam Lake, Bainbridge Is., Puget Sound, elev. 90 m, T25N R2E S29, 28 Sept 1999, *Zika 14424* (OSC).

Previous knowledge. Bullate cotoneaster is native to China, and introduced as an ornamental west of the Cascades.

Significance. First report as a wild plant in Washington.

Cotoneaster simonsii Baker (ROSACEAE).—Grays Harbor Co., roadsides, with *Alnus rubra, Tsuga heterophylla*, Route 105 E of Ocosta, elev. 15 m, T16N R11W S11, 16 Sept. 1999, *Zika 14341* (WTU); King Co., open forest, Lincoln Park, 0.5 km N of Point Williams, Seattle, elev. 45 m, T24N R3E S26, 14 Sept. 1999, *Zika 14325* (WTU); Kitsap Co., woods, near New Brooklyn Rd., Bainbridge Is., Puget Sound, elev. <100 m, T25N R2E S21, 28 Sept. 1999, *Zika 14425* (OSC, WTU); Pacific Co., roadside, Jacobson Rd, Heather, elev. 5 m, T15N R11W S30, 1 Oct. 1999, *Zika 14443* (WTU).

Significance. First report for Washington as a garden escape.

Glyceria canadensis (Michx.) Trin. (POACEAE).—Grays Harbor Co., cranberry fields and ditches, with *Juncus effusus,* Evergreen Park Rd., elev. 5 m, T15N R11W S7, 29 Sept. 1998, *Zika 13646* (WTU); Pacific Co., ditches with *Leersia oryzoides,* Jim Street, 4 km N of Ilwaco, elev. 5 m, T10N R11W S22, 12 Sept. 1998, *Zika 13591* (WTU); ditches, N of Black Lake, elev. 5 m, T10N R11W S28, 29 Sept. 1998, *Zika 13636* (WTU).

Previous knowledge. Native to eastern North America, west to Minnesota. Collected in "a cranberry marsh" in adjacent Clatsop Co., Oregon in 1929 (*Henderson 11841* ORE), 30 km SE, where in 1999 it was a well established weed. Rattlesnake grass is also recorded as a rare weed in southern British Columbia.

Significance. First collection for Washington.

Helleborus foetidus L. (RANUNCULACEAE).—San Juan Co., common in meadow with *Festuca arundinacea, Pteridium, Rubus armeniacus,* near False Bay, San Juan Is., Puget Sound, elev. 20 m, T34N R3W S4, 30 May 1999, *Zika 13766* (WTU).

Previous knowledge. Stinking hellebore is an ornamental native to Europe, planted west of the Cascade Mtns. in the Pacific Northwest.

Significance. First record as an garden escape in Washington.

Hypericum boreale (Britton) E. Bickn. (Clusiaceae).—Grays Harbor Co., cranberry fields and drainage ditches, Evergreen Park Rd., elev. 5 m, T15N R11W S7, 29 Sept. 1998, *Zika 13640* (WTU); bulldozed field, near Hogan Rd., North Bay, elev. 3 m, T18N R11W S17, 4 Oct. 1999, *Zika 14484* (WTU); Pacific Co., sandy banks near cranberry fields, Pioneer Rd., elev. 5 m, T10N R11W S10, 12 Sept. 1998, *Zika 13594* (WTU); swale between sand dunes, marine beach near 10th St., Long Beach, elev. 2 m, T10N R11W S17, 1 Oct. 1999, *Zika 14446* (WTU).

Previous knowledge. Native to eastern North America, as far west as Minnesota. Northern St. Johnswort is a weed associated with cranberry agriculture on the Oregon coast in Coos and Curry Cos., 300 km to the south.

Significance. First record for Washington.

Hypericum canadense L. (CLUSIACEAE).—Grays Harbor Co., cranberry fields and drainage ditches, with *Juncus effusus,* Evergreen Park Rd. elev. 5 m, T15N R11W S7, 16 Sept. 1999, *Zika 14348 & Weinmann* (WTU); ditch, Burrow Rd., N Bay, elev. 3 m, T18N, R11W S17, 4 Oct. 1999, *Zika 14483* (WTU); Pacific Co., sandy cranberry field, near Pioneer Rd., elev. 5 m, T10N R11W S9, 30 Sept. 1999, *Zika 14433* (WTU); ditches between cranberry fields, with *Hypericum anagalloides,* 1 km E of Long Lake, elev. 6 m, T15N R11W S17, 19 Oct. 1998, *Zika 13667* (WTU).

Previous knowledge. Canada St. Johnswort is native to eastern North America as far west as Manitoba, and adventive on cranberry farms on the Oregon coast in Coos and Curry Cos., 300 km to the south.

Significance. First record for Washington.

Hypericum ellipticum Hook. (Clusiaceae).—Grays Harbor Co., cranberry field, with *Equisetum arvense,* Cranberry Rd., Grayland, elev. 5 m, T15N R11W S6, 16 Sept. 1999, *Zika 14342* (UC, WS, WTU); Pacific Co., moist sandy ground, cranberry field, with *Oenanthe,* Heather Rd., Heather, elev. 5 m, T15N R11W S20, 16 Sept. 1999, *Zika 14353* (OSC, US, WTU).

Previous knowledge. Pale St. Johnswort is native to eastern North America, west to North Dakota.

Significance. First report for Washington.

Hypericum mutilum L. (CLUSIACEAE).—King Co., shores of Phantom Lake, with *Scutellaria lateriflora, Lysimachia thyrsiflora, Juncus balticus,* Bellevue, elev. 75 m, T24N R5E S2, 15 Oct. 1999, *Zika 14605 & Weinmann* (WTU); Skagit Co., wet bank, with *Typha latifolia, Myosotis laxa, Potentilla palustris,* Gandy Lake outlet creek, 5 km NW of Concrete, elev. ca. 245 m, T36N R8E S32, 1 Aug. 1989, *Naas 5536* (WTU); Gandy Lake, opening in cattail marsh, elev. ca. 250 m, 24 Aug. 1973, *Naas & Cheney 2751* (WTU).

Previous knowledge. Native to eastern North America as far west as Oklahoma. Dwarf St. Johnswort is recorded as a weed at low elevations 900 km to the south, in Butte and Glenn Cos., California. Skagit Co. records were previously identified as *H. majus.*

Significance. First report for Washington.

Juncus canadensis J. Gay ex Laharpe (Juncaceae).—Clallam Co., Ericsons Bay, Lake Ozette, elev. 10 m, T30N R15W S8, 3 Aug. 1986, *Buckingham et al. 3787, & Ceska 20607* (ONP) [herbarium of Olympic National Park]; Grays Harbor Co., cranberry fields, with *Vaccinium macrocarpon,* 1 km SE of Horseshoe Lake, elev. 5 m, T15N R11W S6, 19 Oct. 1998, *Zika 13658* (WTU); damp bulldozed ground, with *Juncus supiniformis,* near Burrow Rd., North Bay, elev. 3 m, T18N R11W S17, 4 Oct 1999, *Zika 14486* (WTU); Pacific Co., ditch near cranberry fields, with *Glyceria canadensis,* Jim Street, elev. 5 m, T10N R11W S22 W1/2, 12 Sept. 1998, *Zika 13588* (WTU); cranberry fields, with *Potentilla pacifica,* 0.8 km E of Long Lake, elev. 5 m, T15N R11W S17, 19 Oct. 1998, *Zika 13670* (WTU); Skagit Co., *Sphagnum* mat, shore of Summer Lake, with *Sarracenia purpurea, Eriophorum virginicum, Vaccinium oxycoccus,* elev. 200 m, T33N R5E S21, 27 Sept. 1999, *Zika 14419, Weinmann & Weinmann* (MICH, WTU); small pond ca. 0.2 km N of Summer Lake, elev. 200 m, 27 Sept. 1999, *Zika 14423, Weinmann & Weinmann* (WTU).

Previous knowledge. Native to eastern North America, west to Minnesota. Canada rush is known as a weed in wetlands and in cranberry fields in British Columbia and in Coos and Curry Cos., Oregon. Recent reports of *J. brevicaudatus* from Washington (Buckingham *et al.,* Flora of the Olympic Peninsula, 1995) are based on collections of *J. canadensis.*

Significance. First documented report for Washington.

Juncus diffusissimus Buckley (JUNCACEAE).—Cowlitz Co., moist sand flats, Cowlitz R., with *Phalaris arundinacea, Salix sitchensis,* Longview, elev. 2 m, T7N R2W S11, 26 Sept. 1998, *Zika 13624* (WTU); sandy shoreline, Cowlitz R., N end of Castle Rock, 18 July 1994, *Kollock & Wilson s.n.* (OSC, WTU); moist gray sand, Toutle R., with *Juncus bolanderi,* 5 km N of Castle Rock, elev. 24 m, T10N R2W S27, 15 Sept. 1998, *Zika 13614* (WTU); cobble shore, S Fork Toutle R., 1.8 air km E of Toutle, elev. 137 m, T10N R1E S29, 20 Oct. 1998, *Zika 13671* (WTU).

Previous knowledge. Native to the eastern United States, west to Kansas. Known as a weed in Sacramento Valley of California, 800 km to the south. Discovered in the Castle Rock area by Loverna Wilson and Kathleen Kollock in 1994.

Significance. First report for Washington. *Juncus diffusissimus* successfully colonized riverine sand and ash deposits from the 1980 eruption of Mt. St. Helens. Slimpod rush is now frequent on volcanic debris from the mouth of the Cowlitz R. upriver to the shores of S Fork Toutle R. However, the linear population continues upstream of the ash deposits. This distribution suggests the population was originally introduced on private logging lands on the upper tributaries of S Fork Toutle R. At present *J. diffusissimus* is absent from suitable habitat on other tributaries in the Cowlitz R. basin.

Juncus pelocarpus E. Meyer (Juncaceae).—Grays Harbor Co., cranberry fields, Blake Rd., Grayland, elev. 5 m, T15N R11W S6, 19 Oct. 1998, *Zika 13659* (WTU), disturbed damp sandy ground, near Hogan Rd., N shore of N Bay, elev. 3 m, T18N R11W S17, 4 Oct. 1999, *Zika 14508* (WTU); Pacific Co., moist sandy ground, near irrigation pond, Cranberry Rd., elev. 5 m, T11N R11W S34, 12 Sept. 1998, *Zika 13597* (WTU); ditches and cranberry fields, 0.8 km E of Long Lake, elev. 6 m, T15N R11W S17, 19 Oct. 1998, *Zika 13669* (WTU).

Previous knowledge. Native to eastern North America, as far west as Minnesota. Brown-fruited rush was first recorded in 1958 as a cranberry weed in Coos Co., OR, 300 km to the south.

Significance. The first report for Washington.

Lonicera pileata Oliv. (CAPRIFOLIACEAE).—Clal-

lam Co., E end of Lake Crescent, bird-sown shrubs scattered in forest and at edge of clearings, with *Tsuga heterophylla, Alnus rubra,* elev. 195 m, T30N R9W S28, 22 Nov. 1997, *Zika 13408* (WTU).

Previous knowledge. Box-leaved honeysuckle is native to China and commonly planted west of the Cascades.

Significance. First report as a garden escape in Washington.

Salix purpurea L. (SALICACEAE).—Wahkiakum Co., mouth of Elochoman R., N shore, scattered on sand spit, with *S. sessilifolia,* elev. 3 m, T9N R6E S28, 4 June 1999, *Zika 13779* (CAN, WTU).

Previous knowledge. Basket willow is native to Eurasia, and occasionally planted by weavers. It is weedy in eastern North America, W to Colorado.

Significance. First report as a wild plant in Washington.

Triadenum fraseri (Spach) Gleason (CLUSIACEAE).—Pacific Co., cultivated cranberry field, 1 km N of Black Lake, elev. 5 m, T10N R11W S28, 31 Aug. 1999, *Zika 14176* (US, WTU); sandy cranberry field, S of Gile Lake, elev. 5 m, T10N R11W S3, 30 Sept. 1999, *Zika 14438* (WTU).

Previous knowledge. Native to eastern North America, W to Saskatchewan. Marsh St. Johnswort was first detected as a weed in cranberry farms of British Columbia in 1913 (F. Lomer, pers. comm.), where it has been reported as *T. virginicum* (Hueppelsheuser & Emery, A Field Guide to Common Weeds of Cranberries in British Columbia, 1996).

Significance. First report for Washington.

Vaccinium corymbosum L. (Ericaceae).—Grays Harbor Co., cranberry fields near Hogan Rd., N shore of North Bay, elev. 3 m, T18N R11W S17, 4 Oct. 1999, *Zika 14502* (WTU); King Co., boggy N shore of Panther Lake, 6 km S of Renton, elev. 75 m, T22N R5E S5, 15 Oct. 1999, *Zika 14610 & Weinmann* (WTU); undisturbed boggy shore of Tub Lake, 140th St., Burien, elev. 100 m, T23N R4E S16, 14 Oct. 1999, *Zika 14596 & Jacobson* (WTU); common escape near large cultivated blueberry fields, Mercer Slough, Bellevue, elev. 5 m, T24N R5E S5, 6 Oct. 1999, *Zika 14553 & Weinmann* (WTU); marshy NW shoreline of Union Bay, Seattle, elev. 4 m, T25N R4E S16, 27 Aug. 1999, *Zika 14143 & Jacobson* (WTU).

Previous knowledge. Highbush blueberry is commonly cultivated for fruit west of the Cascades. It is native to eastern North America, west to Texas. Birds disperse the seed.

Significance. First report for Washington as an escape from cultivation.

Vaccinium macrocarpon Ait. (Ericaceae).—Grays Harbor Co., roadside ditch, with *Anthoxanthum, Rubus spectabilis,* Route 105, 2.5 km E of Ocosta, elev. 15 m, T16N R11W S11, 16 Sept. 1999, *Zika 14340* (WTU); Pacific Co., peaty clearing, near Jim St., 2 km NE of Seaview, elev. 5 m, T10N R11W S22, 31 Aug. 1999, *Zika 14195* (WTU).

Previous knowledge. Cranberry is native to eastern North America, west to Minnesota. First introduced as a crop plant in Oregon in 1885, and known as a local weed in California and British Columbia. Reported as questionably escaped in Washington (Buckingham et al. Flora of the Olympic Peninsula, 1995).

Significance. First documentation as a naturalized species in Washington.

—Peter F. Zika, Herbarium, Dept. of Botany, Box 355325, Univ. of Washington, Seattle, 98195-5325; Edward R. Alverson, Herbarium, Dept. of Botany & Plant Pathology, Oregon State Univ., Corvallis, OR 97331; and Loverna Wilson, P.O. BOX 2284, Corvallis, OR 97330.